

Name: _____
A2CC: More Circle Practice

Date: _____

Do Now:

1. Find the center and radius of the circle having the following equation:

$$x^2 + y^2 + 14x + 12y + 76 = 0$$

More Practice:

In 1-10, find the center and radius of each of the following circles.

1. $4x^2 + 4y^2 - 16x - 24y + 51 = 0$

2. $2x^2 + 2y^2 - 8x - 12y - 8 = 0$

3. $3x^2 + 8x + 3y^2 + 9y = 5$

4. $2x^2 + 2y^2 + 12x + 8y - 5 = 0$

5. $4x^2 + 5x + 8y - 2 = -4y^2$

6. $5x^2 + 5y^2 - 15x + 10y - 1 = 0$

7. $x^2 + y^2 + 3y = \frac{1}{4}$

8. $9x^2 + 12x + 9y^2 - 77 = 0$

9. $3x^2 - 30x + 3y^2 - 42y = 285$

10. $2x^2 + 2y^2 - 36x + 40y + 290 = 0$

For 11- , use the given information to write the standard form of the circle.

11. $(x - 3)^2 + (y - 14)^2 = 16$ translated 3 right and 4 down

12. $x^2 + y^2 - 18x + 20y + 145 = 0$ translated 1 right and 2 down

13. Ends of diameter: $(-6, -7)$ and $(10, -7)$
14. Center: $(12, 6)$ Area: 49π
15. Center: $(8, -10)$ Circumference: 14π
16. $x^2 + y^2 + 14x - 8y + 29 = 0$ translated 2 left and 3 up
17. Ends of diameter: $(6, 8)$ and $(0, 0)$
18. Ends of diameter: $(1, -5)$ and $(-3, 3)$
19. Center: $(1, -3)$ Circumference: 34π
20. Center: $(-2, -1)$ Area: 81π